Mission

Rapidly deliver agile/adaptive, leading edge Soldier capabilities in order to provide combat overmatch today and be more lethal tomorrow.

Vision

Be the world’s premier capability provider for the Integrated Soldier and Squad weapons platform.

Priorities

1. Deliver Capability
2. Take Care of Our People
3. Develop a Culture of Innovation
PEO Soldier Major Activities

PM Soldier Lethality
- Individual Weapons
- Crew-Served Weapons
- Next Generation Weapons

PM Soldier Survivability
- Soldier Protective Equipment
- Soldier Clothing & Individual Equipment

PM Soldier Maneuver & Precision Targeting
- Soldier Maneuver Sensors
- Soldier Precision Targeting Devices

PM Close Combat Squad
- Ground Soldier Systems
- Soldier Integration Facility (SIF)

PD Rapid Equipping Force
- C-UAS
- Tactical ISR
- Electronic Warfare
- COP/FOB Force Protection

As of: 1 October 2019
Army Materiel Enterprise (AME)

**Supported CFTs**
- Soldier Lethality
- Network
- Long Range Precision Fires
- Next Generation Combat Vehicle
- Future Vertical Lift
- Air & Missile Defense
- Synthetic Training Environment
- Assured PNT

**Supported CFTs**

**Army Futures Command (AFC)**
- Futures & Concepts Directorate
  - Joint Modernization Command
  - Aviation Center
  - Intelligence Center
  - Cyber Center
  - Fires Center
  - Chaplain Center
  - Maneuver Center
  - Sustainment Center
  - Mission Command Center
  - Maneuver Support Center
  - Research & Analysis Center

**Army Materiel Command (AMC)**

**Assistant Secretary of the Army**
- (Acquisition, Logistics & Technology)

**12 Program Executive Offices**

**Contracting & Sustainment**

**Army Contracting Command**
- Contracting Centers (x6)

**Life Cycle Management Commands (x4)**
- TACOM
- AMCOM
- CECOM
- JM&L

**Training & Doctrine Command (TRADOC)**
- Rapid Equipping Force 10-Liners

**HQDA Directed Requirements (ONS, etc.)**

**Army Test & Evaluation Command (ATEC)**

**Coordination**

**OCIE Sustainment & Contracting Support**

**US Army Medical Research & Materiel Command**

**Defence Logistics Agency Troop Support**

**Soldier**
- Chemical-Biological Defense (Joint)
- Intelligence Electronic Warfare & Sensors
- Ground Combat Systems
- Combat Support & Combat Service Support
- Simulation Training & Instrumentation
- Assembled Chemical Weapon Alternatives

**Supporting**

**Enterprise Information Systems**
- Aviation
- Missiles & Space

**Joint PEO Armaments & Ammunition**

**Command Control Communications – Tactical**

**Centers**
- Army Research Lab
- Armaments
- Aviation & Missile
- Chemical & Biological
- Data & Analysis
- Ground Vehicle Systems
- Soldier (Natick)
- C5ISR
Adaptive Squad Architecture

Need to go from this...

- 85+ items/components
- 122 lbs. of kit
- Redundant power sources
- Connected with cables

Adaptive Squad Architecture is government-owned, collaboratively developed architecture that documents all existing and future Soldier/Squad variations, including all interface controls between Soldier/Squad systems and external systems.

ASA enables systematic modernization and quantitative assessment of new capabilities on the overall effectiveness of Soldiers/Squads...

...to this!
Treating the Squad as a Major Weapons Platform

Value of Adaptive Squad Architecture (ASA)

- Applies a systems engineering approach to the Soldier & Squad
- Centralizes Power & Processing
- Defines common standards & interfaces
- Drives down SWaP, creates efficiencies
- Fosters innovation within Industry
- Essential to Integration & Interoperability

Capability Set Example

- IVAS: Wider FOV for improved SA
- IHPS: Integrated Visual Augmentation System
- UHMA: Universal Helmet Mount Assembly
- FWS-I: Family of Weapon Sights-Individual
- NGSW-FC: Next Generation Squad Weapons Fire Control
- NGSW-R or NGSW-AR
- ISW: Intra-Soldier Wireless
- IVAS: Integrated Visual Augmentation System
- IHPS: Integrated Helmet Protection System
- ITN: Integrated Tactical Network
- ENVG-B: Enhanced Night Vision Goggles
- EUD: End User Device (Nett Warrior)
- SBS: Soldier Borne Sensor
- Power/Data Rail

Value of Integrated Capability Sets

- Rapid Target Acquisition (RTA) (“Offset” Shooting)
- Rapid Distribution of Digital SA & Targeting Data
- Fight, Rehearse and Train with one “system”
- Fielded as a system with Integrated Training
- Targeting & SA (wide & small FOV) simultaneously
- Common Operating Picture across Squad
- Increased Lethality thru shared, enhanced Artificial Intelligence/Augmented Reality
- Wireless Movement of Data around Soldier & across Squads
- Shared Squad Level ISR
- Opportunities to Combine Capabilities & Reduce Form Factors (USG provides infrastructure & architecture; industry provides compliant capability at reduced cost)
Optimizing the Close Combat Squad

Soldier Integration Facility (SIF) (Fort Belvoir, VA)

Integrate Technical Systems
Adaptive Squad Architecture (ASA)
Squad Performance Model (SPM)

Soldier/Squad Performance Research Institute (S2PRINT) (Natick, MA)
Validating Performance & Training Approaches
Monitoring and Assessing Soldier and Tactical Readiness and Effectiveness (MASTR-E)

BattleLab Enabled by EXFOR unit (Fort Benning, GA)
Operational Validation
DOTMLPF Analysis
Test & Experiment, M&S Evaluate
How Can Industry Help?

**LETHALITY**
- Weapons: Extending the life of the weapon (lubricants, surface treatments, barrel linings)
- Intelligent Rail Technology: Integrated power and data
- Fire Control: Range, resolution, accuracy, environmental ballistic solution, delayed trigger); improved plastics and manufacturing techniques of plastics to replace glass lenses for weight reduction (molded aspheres)

**SITUATIONAL AWARENESS (Goggles and HUD)**
- Power: Advanced battery chemistries (anode, cathode, electrolytes, etc.); S/W management, E-textiles; conductive charging
- Resolution, FOV, Augmented Target Recognition, accuracy
- Reduced latency
- 3D modeling and rendering
- Innovative materials to drive down weight
- Low power sensors (IR, low light)
- GPS-denied solutions
How Can Industry Help?

**TRAINING/HUMAN PERFORMANCE**
- Sensors for biomarkers to monitor cognitive and physical state
- Neuro-stimulation tools and nutrition

**MOBILITY**
- Exoskeleton

**SURVIVABILITY**
- Ballistic and Blast Protection: Maintain/Increase protection while reducing weight and considering mobility
- Organization Clothing and Individual Equipment (OCIE): Reduced signature (IR, VIS, etc.); protection from the elements; better integration
Every Ounce Matters, Every Bullet Counts